

Application/Control Number: 10/758,026

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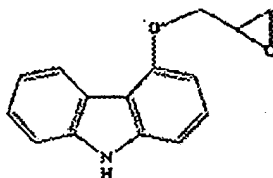
Rharmon

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claims 1-20 (originall)

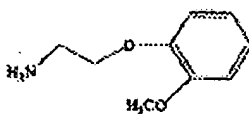
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1. A process for preparing carvedilol comprising a step of reacting a compound of formula II, 4-(oxiran-2-ylmethoxy)-9H-carbazole,



II

with a compound of formula III, 2-(2-methoxyphenoxy)ethylamine



III

wherein the compound of formula III is at a molar excess over the compound of formula II.

2. The process of claim 1, wherein the compound of formula III and the compound of formula II are at a molar ratio from about 1.5:1 to about 100:1.
3. The process of claim 1, wherein the compound of formula III and the compound of formula II are at a molar ratio from about 2.8:1 to about 10:1.
4. The process of claim 1, wherein the compound of formula III and the compound of formula II are at a molar ratio from about 2.8:1 to about 6:1.
5. The process of claim 1, wherein the reacting step is performed in a solvent.

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6. The process of claim 5, wherein the solvent is selected from the group consisting of

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toluene, xylene and heptane.

7. The process of claim 1, wherein the reacting step is performed in a solvent mixture wherein the solvent mixture comprises multiple solvents.
8. The process of claim 7, wherein a solvent of the solvent mixture is selected from the group consisting of toluene, xylene and heptane.
9. The process of claim 1, wherein the reacting step is performed at a temperature from about 25°C to about 150°C.
10. The process of claim 1, wherein the reacting step is performed at a temperature from about 60°C to about 120°C.
11. The process of claim 1, wherein the reacting step is performed under neat conditions.
12. The process of claim 11, wherein the neat conditions are obtained by melting a solid form of the compound of formula III to form a liquid and, dissolving the compound of formula II in the liquid to form a reaction mixture.
13. The process of claim 11, further comprising a step of reducing the temperature of the reaction mixture after dissolving the compound of formula II.
14. The process of claim 13, wherein the temperature is reduced to about 70°C.
15. The process of claim 11, further comprising a step of adding an organic solvent: water mixture to the reaction mixture.
16. The process of claim 15, wherein the organic solvent is selected from the group consisting of ethyl acetate, butyl acetate and methyl ethyl ketone.
17. The process of claim 15, further comprising a step of adjusting the pH of the organic solvent: water mixture to the reaction mixture after the organic solvent: water mixture is added to the reaction mixture.
18. The process of claim 17, wherein the pH is adjusted to less than about pH 5.
19. The process of claim 17, wherein the pH is adjusted from about pH 3 to about pH 5.

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20. The process of claim 11, further comprising steps of:
  - a) isolating carvedilol hydrochloride after adjusting the pH, and
  - b) purifying carvedilol.
21. The process of claim 20, wherein carvedilol hydrochloride is a hydrate.

Claims 22-82 (cancelled)